SAR TEST REPORT

Test Report No. : 28HE0115-HO-02-I

Applicant	:	**NEC Corporation**
Type of Equipment	:	**Factory Computer as FC-NOTE Series**
Model No.	:	**FC-N22A**
FCC ID	:	**BSFFC-N22A**
Test regulation	:	**FCC47CFR 2.1093** **FCC OET BULLETIN 65, SUPPLEMENT C**
Test Result	:	**Complied**
<Stand alone> **Max. SAR Value**	:	**0.517W/kg (Body, 2437MHz)**

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2. The results in this report apply only to the sample tested.
3. This sample tested is in compliance with the limits of the above regulation.
4. The test results in this test report are traceable to the national or international standards.
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Date of test: May 09 to 13, 2008

Tested by:

Miyo Kishimoto
EMC Services

Hisayoshi Sato
EMC Services

Approved by :

Tetsuo Maeno
Site Manager of EMC Services

NVLAP LAB CODE: 200572-0

This laboratory is accredited by the NVLAP LAB CODE 200572-0, U.S.A. The tests reported herein have been performed in accordance with its terms of accreditation.
*As for the range of Accreditation in NVLAP, you may refer to the WEB address, http://uljapan.co.jp/emc/nvlap.htm

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SECTION 1: Customer information

Company Name	:	NEC Corporation
Address	:	1-10 Nissin-cho, Fuchu-shi, Tokyo, 183-8501 Japan
Telephone Number	:	+81-42-333-1031
Facsimile Number	:	+81-42-333-1054
Contact Person	:	Tomomi Nakano

SECTION 2: Equipment under test (E.U.T.)

2.1 Identification of E.U.T.

Type of Equipment	:	Factory Computer as FC-NOTE Series	
Model No.	:	FC-N22A	
Serial No.	:	PP-091	
Rating	:	AC100-240V / 1.1A-0.5A	
Normal Battery(Standard)	:	Type	: Li-ion Battery
		Model name	: Y00-00645
		Rating	: DC11.1V/5.2Ah
Option1 Battery(Stamina)	:	Type	: Li-ion Battery
		Model name	: Y00-00647
		Rating	: DC11.1V/6.0Ah
Option2 Battery	:	Type	: Li-ion Battery
(Wide Range Temperature)		Model name	: Y00-00646
		Rating	: DC11.1V/7.8Ah
Receipt Date of Sample	:	April 21, 2008	
Country of Mass-production	:	Japan	
Condition of EUT	:	Production prototype (Not for Sale: This sample is equivalent to mass-produced items.)	
Modification of EUT	:	No Modification by the test lab	

2.1 Identification of E.U.T.

Model No: FC-N22A (referred to as the EUT in this report) is the Factory Computer as FC-NOTE Series.
Feature of EUT: EUT is the Factory Computer as FC-NOTE Series which has IEEE802.11b, IEEE802.11g, IEEE802.11a functions and approved Bluetooth module (FCC ID: CWTUGPZ6-C3).

	IEEE802.11b	IEEE802.11g	IEEE802.11a	Bluetooth
Frequency band	2412 - 2462MHz		5180-5240MHz (Lower band) 5260-5320MHz (Middle band) 5745-5825MHz (Upper band)	2402-2480MHz
Clock frequencies in the system (radio part)	CPU: 1.05GHz			
Channel spacing	5MHz		20MHz	1MHz
Type of Modulation	DSSS	OFDM		FHSS
Antenna Type	PIFA			
Antenna Connector Type	U.FL-LP-088			
Antenna Gain	Main: L=570mm Gain w/cable loss 2400-2500MHz: 0.36 dBi (peak) Aux: L=385mm Gain w/cable loss 2400-2500MHz: -2.28 dBi (peak)		Main: L=570mm Gain w/cable loss 5150-5350MHz: 0.69 dBi (peak) 5470-5725MHz: 1.27 dBi (peak) 5725-5850MHz: 0.32 dBi (peak) Aux: L=385mm Gain w/cable loss 5150-5350MHz: 4.32 dBi (peak) 5470-5725MHz: 4.42 dBi (peak) 5725-5850MHz: 1.84 dBi (peak)	-3.0dBi
Power Supply (radio part)	DC 3.3V			

SECTION 3 : Test standard information

3.1 Requirements for compliance testing defined by the FCC

The US Federal Communications Commission has released the report and order “Guidelines for Evaluating the Environmental Effects of RF Radiation", ET Docket No. 93-62 in August 1996. The order requires routine SAR evaluation prior to equipment authorization of portable transmitter devices, including portable telephones. For consumer products, the applicable limit is 1.6 mW/g for an uncontrolled environment and 8.0 mW/g for an occupational/controlled environment as recommended by the ANSI/IEEE standard C95.1-1992. According to the Supplement C of OET Bulletin 65 “Evaluating Compliance with FCC Guide-lines for Human Exposure to Radio frequency Electromagnetic Fields", released on Jun 29, 2001 by the FCC, the device should be evaluated at
maximum output power (radiated from the antenna) under “worst-case” conditions for normal or intended use, incorporating normal antenna operating positions, device peak performance frequencies and positions for maximum RF energy coupling.

1 Specific Absorption Rate (SAR) is a measure of the rate of energy absorption due to exposure to an RF transmitting source (wireless portable device).
2 IEEE/ANSI Std. C95.1-1992 limits are used to determine compliance with FCC ET Docket 93-62.

3.2 Procedure and result

No.	Item	Test Procedure	Limit	Remarks	Exclusion	Result
1	Human Exposure	FCC OET BULLETIN 65, SUPPLEMENT C	FCC47CFR 2.1093	SAR Measurement	N/A	Complied Max.SAR = 0.517 W/kg
Note: UL Japan, Inc. 's SAR Work Procedures QPM46 and QPM47						

<Stand alone>

Max. SAR Value : 0.517W/kg (Body, 2437MHz)

< Simultaneous transmission >

This EUT has the Bluetooth unlicensed transmitter

The simultaneous transmission SAR is not required for the following simultaneous transmission conditions, according to the FCC document 447498 D01 3)b)ii)(1)

(1) The closest antenna separation distance is ≥ 5 cm for the simultaneous transmitting antennas (Bluetooth antenna) within the EUT. Refer to the configuration of EUT to Appendix 1.

(2) The Output power of Bluetooth power is < 60/f mW. Refer to the configuration of EUT to Section 6.3.
Therefore the stand-alone SAR evaluation of Bluetooth is not required.

3.3 Exposure limit

(A) Limits for Occupational/Controlled Exposure (W/kg)

Spatial Average (averaged over the whole body)	Spatial Peak (averaged over any 1g of tissue)	Spatial Peak (hands/wrists/feet/ankles averaged over 10g)
0.4	8.0	20.0

(B) Limits for General population/Uncontrolled Exposure (W/kg)

Spatial Average (averaged over the whole body	Spatial Peak (averaged over any 1g of tissue)	Spatial Peak (hands/wrists/feet/ankles averaged over 10g)
0.08	1.6	4.0

Occupational/Controlled Environments: are defined as locations where there is exposure that may be incurred by people who are aware of the potential for exposure, (i.e. as a result of employment or occupation).

General Population/Uncontrolled Environments: are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

NOTE:GENERAL POPULATION/UNCONTROLLED EXPOSURE SPATIAL PEAK(averaged over any 1g of tissue) LIMIT 1.6 W/kg

3.4 Test Location

*Shielded room for SAR testings
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3.5 Confirmation before SAR testing

Correlation of Output Power between EMC and SAR tests (WLAN IEEE802.11b/g)
It was checked that the antenna port power was correlated within 0~+5% (FCC requirements)
The result is shown in Section 6.1.

- Peak power at EMC test
  EMC power was measured when EMC was tested. (Test date: April 22,2008).
- Peak power at SAR test
  SAR power was measured for SAR was tested. (Test date: May 09, 2008).

Crest factor determing
Crest factor was calculated by the duty factor measured at each data rate.
The duty factor was calculated according to the following equation:

Duty factor = on time / 1 cycle (on+off time)

The result of duty factor is shown in section 6.4.

3.6 Confirmation after SAR testing

It was checked that the power drift is within ±5% in the evaluation procedure of SAR testing.
The result is shown in APPENDIX 2.

3.7 Measurement procedure

The tests from Step1 to Step8 were performed with Main antenna and AUX antenna respectively

1. IEEE 802.11b

Step1. The data rate DBPSK of the highest average power* and CCK of the highest data rate were compared.

Step2. The searching for the worst condition by battery change
This test was performed at the worst modulation of Step1, and only Main antenna.

Step3. The searching for the worst position
This test was performed at the worst condition of Step1and 2.

Step4. The changing to the Low and High channels
This test was performed at the worst conditions of Step 3.

2. IEEE 802.11g

The tests from Step5 to Step8 were performed with worst battery in the 11b mode's test.

Step5. The searching for the worst modulation
The data rate BPSK of the highest average power* and 64QAM of the highest data rate were compared.

Step6. The searching for the worst position
This test was performed at the worst modulation of Step5.

Step7. The changing to the Low and High channels
This test was performed at the worst conditions of Step 6.

* Refer to the average power data to Section .6.2.

Change distance between EUT and SAM Twin Phantom

Step8. Change separation
The measurement was performed with the distance, 5mm,10mm and 15mm to check if the shortest distance may not have the worst value at the conditions of the highest SAR value.

3.8 Test setup of EUT

We performed the test positions at the following, according to the FCC document 447498 D01 4)
The EUT has multiple display orientations supporting both portrait and landscape configurations.
The test position is required for the tablet edge closet to the user within 5cm of each antenna located for the applicable display orientation.
For the tablet edge ≥ 5cm from each antenna located, the test positions were excluded. (Refer to the Appendix 1)

(1) Top (Tablet mode/Main ant.):
The test was performed in touch with Top edge of the EUT to the flat section of SAM Twin phantom.

(2) Side (Tablet mode/AUX ant) :
The test was performed in touch with right side edge of the EUT to the flat section of SAM Twin phantom.

(3) Bottom (Tablet mode/Main ant.& AUX ant.):
The test was performed in touch with bottom surface of the EUT with tablet mode to the flat section of SAM Twin phantom.

(4) Bottom (Laptop mode/Main ant.& AUX ant.):
The test was performed in touch with bottom surface of the EUT with Laptop mode to the flat section of SAM Twin phantom.

(5) Top 5mm(Tablet mode/Main ant.) :
The measurement opened 5mm distance between the EUT and flat section of SAM Twin Phantom.

(6) Top 10mm(Tablet mode/Main ant.) :
The measurement opened 10mm distance between the EUT and flat section of SAM Twin Phantom.

(7) Top 15mm(Tablet mode/Main ant.) ::
The measurement opened 15mm distance between the EUT and flat section of SAM Twin Phantom.

SECTION 4 : Operation of E.U.T. during testing

4.1 Operating modes for SAR testing

The frequency band and the modulation used in the testing of IEEE.802.11b/g are shown as a following.

1. IEEE 802.11b mode
Tx frequency band : 2412-2462MHz
Channel : 1ch(2412MHz),6ch(2437MHz),11ch(2462MHz)
Modulation : DSSS
Crest factor* : 1.0(1Mbps),1.2(11Mbps)

2. IEEE 802.11g mode
Tx frequency band : 2412-2462MHz
Channel : 1ch(2412MHz),6ch(2437MHz),11ch(2462MHz)
Modulation : OFDM
Crest factor* : 1.1(6Mbps),1.2(12Mbps),1.4(24Mbps).1.7(48Mbps)

* Refer to the Section 6.4.

SECTION 5 : Test surrounding

5.1 Measurement uncertainty

The uncertainty budget has been determined for the DASY4 measurement system according to the SPEAG documents[6][7] and is given in the following Table.

Error Description	Uncertainty value ± %	Probability distribution	divisor	(ci) 1g	Standard Uncertainty (1g)	vi or veff
Measurement System						
Probe calibration	±4.8	Normal	1	1	±4.8	∞
Axial isotropy of the probe	±4.7	Rectangular	√3	$(1\text{-cp})^{1/2}$	±1.9	∞
Spherical isotropy of the probe	±9.6	Rectangular	√3	$(cp)^{1/2}$	±3.9	∞
Boundary effects	±1.0	Rectangular	√3	1	±0.6	∞
Probe linearity	±4.7	Rectangular	√3	1	±2.7	∞
Detection limit	±1.0	Rectangular	√3	1	±0.6	∞
Readout electronics	±1.0	Normal	1	1	±1.0	∞
Response time	±0.8	Rectangular	√3	1	±0.5	∞
Integration time	±2.6	Rectangular	√3	1	±1.5	∞
RF ambient Noise	±3.0	Rectangular	√3	1	±1.7	∞
RF ambient Reflections	±3.0	Rectangular	√3	1	±1.7	∞
Probe Positioner	±0.4	Rectangular	√3	1	±0.2	∞
Probe positioning	±2.9	Rectangular	√3	1	±1.7	∞
Max.SAR Eval.	±1.0	Rectangular	√3	1	±0.6	∞
Test Sample Related						
Device positioning	±2.9	Normal	1	1	±2.9	9
Device holder uncertainty	±3.6	Normal	1	1	±3.6	7
Power drift	±5.0	Rectangular	√3	1	±5.8	∞
Phantom and Setup						
Phantom uncertainty	±4.0	Rectangular	√3	1	±2.3	∞
Liquid conductivity (target)	±5.0	Rectangular	√3	0.64	±1.8	∞
Liquid conductivity (meas.)	±5.0	Rectangular	1	0.64	±3.2	∞
Liquid permittivity (target)	±5.0	Rectangular	√3	0.6	±1.7	∞
Liquid permittivity (meas.)	±5.0	Rectangular	1	0.6	±3.0	∞
Combined Standard Uncertainty					**±12.17**	
Expanded Uncertainty (k=2)					**±24.34**	

SECTION 6 : Confirmation before/after testing

6.1 Conducted power before (WLAN)

6.1.1 Correlation of EMC power and SAR power

EMC power

This data is reference data of EMC test. (Report No.28HE0115-HO-02-A)
Date of test: April 22,2008

<Peak Power>FCC Part15 Subpart C

[IEEE802.11b] 11Mbps (Worst), ANT: MAIN(Worst)					
Ch	Freq. [MHz]	P/M(PK) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm]
Low	2412.0	5.69	1.93	10.23	17.85
Mid	2437.0	5.39	1.93	10.23	17.55
High	2462.0	5.29	1.93	10.23	17.45

[IEEE802.11g] 6Mbps (Worst), ANT: MAIN(Worst)					
Ch	Freq. [MHz]	P/M(PK) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm]
Low	2412.0	10.19	1.93	10.23	22.35
Mid	2437.0	10.11	1.93	10.23	22.27
High	2462.0	10.17	1.93	10.23	22.33

Sample Calculation: Result = Reading + Cable Loss + Attenuator Loss
*The test result is round off to one or two decimal places, so some differences might be observed.

SAR power

It was checked that the antenna port power was correlated within 0~+5% (FCC requirements)
Date of test: May 09, 2008

<Peak Power>

[IEEE802.11b] 11Mbps (Worst), ANT: MAIN(Worst)					
Ch	Freq. [MHz]	P/M(PK) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm]
Low	2412.0	5.73	1.93	10.23	17.89
Mid	2437.0	5.41	1.93	10.23	17.57
High	2462.0	5.35	1.93	10.23	17.51

[IEEE802.11g] 6Mbps (Worst), ANT: MAIN(Worst)					
Ch	Freq. [MHz]	P/M(PK) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm]
Low	2412.0	10.21	1.93	10.23	22.37
Mid	2437.0	10.15	1.93	10.23	22.31
High	2462.0	10.19	1.93	10.23	22.35

Sample Calculation: Result = Reading + Cable Loss + Attenuator Loss
*The test result is round off to one or two decimal places, so some differences might be observed.

6.1.2 Reference DATA of SAR power

<Average Power >

Date of test: May 09, 2008

[IEEE802.11b] 1Mbps (Main Antenna)					
Ch	Freq. [MHz]	P/M(AVG) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm]
Low	2412.0	1.54	1.93	10.23	13.70
Mid	2437.0	1.91	1.93	10.23	14.07
High	2472.0	1.16	1.93	10.23	13.32

[IEEE802.11b] 1Mbps (AUX Antenna)					
Ch	Freq. [MHz]	P/M(AVG) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm]
Low	2412.0	1.16	1.93	10.23	13.32
Mid	2437.0	1.93	1.93	10.23	14.09
High	2472.0	0.37	1.93	10.23	12.53

[IEEE802.11g] 6Mbps (Main Antenna)					
Ch	Freq. [MHz]	P/M(AVG) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm]
Low	2412.0	1.47	1.93	10.23	13.63
Mid	2437.0	1.62	1.93	10.23	13.78
High	2462.0	1.56	1.93	10.23	13.72

[IEEE802.11g] 6Mbps (AUX antenna)					
Ch	Freq. [MHz]	P/M(AVG) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm]
Low	2412.0	1.24	1.93	10.23	13.40
Mid	2437.0	1.07	1.93	10.23	13.23
High	2462.0	0.39	1.93	10.23	12.55

Sample Calculation: Result = Reading + Cable Loss + Attenuator Loss

*The test result is round off to one or two decimal places, so some differences might be observed.

6.2 Decision of DATA rate for SAR test

Date of test: May 09, 2008

11b(Main Antenna)

Data rate [MHz]	Freq. [MHz]	P/M(AVG) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm]
1	2437.0	1.97	1.93	10.23	14.13
2	2437.0	1.56	1.93	10.23	13.72
5.5	2437.0	1.35	1.93	10.23	13.51
11	2437.0	1.10	1.93	10.23	13.26

11b(AUX Antenna)

Data rate [MHz]	Freq. [MHz]	P/M(AVG) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm]
1	2437.0	1.91	1.93	10.23	14.07
2	2437.0	1.74	1.93	10.23	13.90
5.5	2437.0	1.56	1.93	10.23	13.72
11	2437.0	1.24	1.93	10.23	13.40

11g(Main Antenna)

Data rate [MHz]	Freq. [MHz]	P/M(AVG) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm]
6	2437.0	1.62	1.93	10.23	13.78
9	2437.0	1.45	1.93	10.23	13.61
12	2437.0	1.31	1.93	10.23	13.47
18	2437.0	0.99	1.93	10.23	13.15
24	2437.0	0.79	1.93	10.23	12.95
36	2437.0	0.43	1.93	10.23	12.59
48	2437.0	-0.48	1.93	10.23	11.68
54	2437.0	-0.63	1.93	10.23	11.53

11g(AUX Antenna)

Data rate [MHz]	Freq. [MHz]	P/M(AVG) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm]
6	2437.0	0.97	1.93	10.23	13.13
9	2437.0	0.71	1.93	10.23	12.87
12	2437.0	0.52	1.93	10.23	12.68
18	2437.0	0.24	1.93	10.23	12.40
24	2437.0	-0.16	1.93	10.23	12.00
36	2437.0	-0.76	1.93	10.23	11.40
48	2437.0	-1.21	1.93	10.23	10.95
54	2437.0	-1.99	1.93	10.23	10.17

Sample Calculation: Result = Reading + Cable Loss + Attenuator Loss

*The test result is round off to one or two decimal places, so some differences might be observed.

6.3 Conducted power before (Bluetooth)

EMC power

This data is reference data of EMC test. (Report No.28DE0007-YK-01-A)
Date of test: November 09,2007

<Peak Power>FCC Part15 Subpart C

DH5				
CH	FREQ [GHz]	P/M Reading [dBm]	Cable Loss [dB]	Results [dBm]
Low	2402.00	0.38	2.16	2.54
Mid	2441.00	-0.02	2.41	2.39
High	2480.00	-0.57	2.33	1.76

3DH5				
CH	FREQ [GHz]	P/M Reading [dBm]	Cable Loss [dB]	Results [dBm]
Low	2402.00	2.29	2.16	4.45
Mid	2441.00	1.74	2.41	4.15
High	2480.00	0.91	2.33	3.24

Sample Calculation: Result = Reading + Cable Loss + Attenuator Loss

*The test result is round off to one or two decimal places, so some differences might be observed.

SAR power

It was checked that the antenna port power was correlated within 0~+5% (FCC requirements)
Date of test: May 13, 2008

DH5				
CH	FREQ [GHz]	P/M Reading [dBm]	Cable Loss [dB]	Results [dBm]
Low	2402.00	1.81	0.78	2.59
Mid	2441.00	1.63	0.78	2.41
High	2480.00	1.02	0.78	1.80

3DH5				
CH	FREQ [GHz]	P/M Reading [dBm]	Cable Loss [dB]	Results [dBm]
Low	2402.00	3.71	0.78	4.49
Mid	2441.00	3.43	0.78	4.21
High	2480.00	2.60	0.78	3.38

Sample Calculation: Result = Reading + Cable Loss + Attenuator Loss

*The test result is round off to one or two decimal places, so some differences might be observed.

6.4 Result of Duty factor verifications

The maximum duty factor of test mode was checked. The results are in the table below.
When the user uses EUT, the duty factor is not exceeded from the duty factor of the test mode.

11b		
DATA rate [Mbps]	Duty [%]	Crest factor for SAR
DBPSK (1Mbps)	98	1.0
DQPSK (2Mbps)	97	N/A*
CCK (5.5Mbps)	92	N/A*
CCK (11Mbps)	87	1.2

11g / 11a(Low&High Band)		
DATA rate [Mbps]	Duty [%]	Crest factor for SAR
BPSK (6Mbps)	91	1.1
BPSK (9Mbps)	87	N/A*
QPSK (12Mbps)	84	1.2
QPSK (18Mbps)	78	N/A*
16QAM (24Mbps)	73	1.4
16QAM (36Mbps)	64	N/A*
64QAM (48Mbps)	58	1.7
64QAM (54Mbps)	55	N/A*

*Reference: SAR test was not performed at the data rate.

SECTION 7 : Measurement results

7.1 Body SAR 2450MHz (Main Antenna)

Liquid Depth (cm)	: **15.0**	Model	: **FC-N22A**
Parameters	: **εr =50.6, σ =2.03**	Serial No.	: **PP-091**
Ambient temperature(deg.c.)	: **24.5**	Modulation	: **DSSS,OFDM**
Relative Humidity (%)	: **41**	Crest factor	: **See to the Section 4.1**
Date	: **May 09, 2008**	Measured By	: **Miyo Kishimoto**

Frequency			Modulation	Phantom Section	EUT Set-up Conditions				Liquid Temp.[deg.c]		SAR(1g) [W/kg]
Mode	CH	[MHz]			Antenna	Position	Separation [mm]	Battery	Before	After	Maximum value of multi-peak
11b	**Step 1. Search for the worst modulation**										
	6	2437	DBPSK(1Mbps)	Flat	Main	Top (Tablet)	0	Normal	23.8	23.8	**0.367**
	6	2437	CCK(11Mbps)	Flat	Main	Top (Tablet)	0	Normal	23.8	23.8	**0.372**
	Step 2. Search for the worst battery										
	6	2437	CCK(11Mbps)	Flat	Main	Top (Tablet)	0	Option 1	23.8	23.8	**0.415**
	6	2437	CCK(11Mbps)	Flat	Main	Top (Tablet)	0	Option 2	23.8	23.9	**0.379**
	Step 3. Search for the worst position										
	6	2437	CCK(11Mbps)	Flat	Main	Bottom (Tablet)	0	Option 1	24.0	24.0	**0.00591**
	6	2437	CCK(11Mbps)	Flat	Main	Bottom (Laptop)	0	Option 1	24.0	23.9	**0.00152**
	Step 4. Change to the channels										
	1	2412	CCK(11Mbps)	Flat	Main	Top (Tablet)	0	Option 1	23.9	24.1	**0.455**
	11	2462	CCK(11Mbps)	Flat	Main	Top (Tablet)	0	Option 1	24.1	24.2	**0.440**
11g	**Step 5. Search for the worst modulation**										
	6	2437	BPSK(6Mbps)	Flat	Main	Top (Tablet)	0	Option 1	23.9	23.9	**0.517**
	6	2437	QPSK(12MbpS)	Flat	Main	Top (Tablet)	0	Option 1	23.9	23.9	**0.444**
	6	2437	16QAM(24Mbps)	Flat	Main	Top (Tablet)	0	Option 1	23.9	23.9	**0.373**
	6	2437	64QAM(48Mbps)	Flat	Main	Top (Tablet)	0	Option 1	23.9	23.9	**0.314**
	Step 6. Search for the worst position										
	6	2437	BPSK(6Mbps)	Flat	Main	Bottom (Tablet)	0	Option 1	23.8	23.8	**0.00763**
	6	2437	BPSK(6Mbps)	Flat	Main	Bottom (Laptop)	0	Option 1	23.8	23.8	**0.00123**
	Step 7. Change to the channels										
	1	2412	BPSK(6Mbps)	Flat	Main	Top (Tablet)	0	Option 1	24.2	24.1	**0.450**
	11	2462	BPSK(6Mbps)	Flat	Main	Top (Tablet)	0	Option 1	24.1	24.1	**0.500**

7.2 Body SAR 2450MHz (AUX Antenna)

Liquid Depth (cm)	: **15.0**	Model	: **FC-N22A**
Parameters	: **εr =50.2, σ =2.01**	Serial No.	: **PP-091**
Ambient temperature(deg.c.)	: **23.5**	Modulation	: **DSSS, OFDM**
Relative Humidity (%)	: **39**	Crest factor	: **See to the Section 4.1**
Date	: **May 12, 2008**	Measured By	: **Hisayoshi Sato**

Frequency			Modulation	Phantom Section	EUT Set-up Conditions				Liquid Temp.[deg.c]		SAR(1g) [W/kg]
Mode	CH	[MHz]			Antenna	Position	Separation [mm]	Battery	Before	After	Maximum value of multi-peak
11b	**Step 1. Search for the worst modulation**										
	6	2437	DBPSK(1Mbps)	Flat	AUX	Right Side(Tablet)	0	Option 1	22.9	22.9	**0.283**
	6	2437	CCK(11Mbps)	Flat	AUX	Right Side(Tablet)	0	Option 1	22.9	22.9	**0.304**
	Step 3. Search for the worst position										
	6	2437	CCK(11Mbps)	Flat	AUX	Bottom (Tablet)	0	Option 1	22.9	22.9	**0.017**
	6	2437	CCK(11Mbps)	Flat	AUX	Bottom (Laptop)	0	Option 1	22.8	22.8	**0.014**
	Step 4. Change to the channels										
	6	2437	CCK(11Mbps)	Flat	AUX	Right Side(Tablet)	0	Option 1	22.8	22.8	**0.317**
	6	2437	CCK(11Mbps)	Flat	AUX	Right Side(Tablet)	0	Option 1	22.8	22.8	**0.249**
11g	**Step 5. Search for the worst modulation**										
	6	2437	BPSK(6Mbps)	Flat	AUX	Right Side(Tablet)	0	Option 1	22.9	22.9	**0.247**
	6	2437	QPSK(12MbpS)	Flat	AUX	Right Side(Tablet)	0	Option 1	23.0	23.0	**0.180**
	6	2437	16QAM(24Mbps)	Flat	AUX	Right Side(Tablet)	0	Option 1	22.9	22.9	**0.170**
	6	2437	64QAM(48Mbps)	Flat	AUX	Right Side(Tablet)	0	Option 1	22.9	22.9	**0.145**
	Step 6. Search for the worst position										
	6	2437	BPSK(6Mbps)	Flat	AUX	Bottom (Tablet)	0	Option 1	22.9	22.9	**0.006**
	6	2437	BPSK(6Mbps)	Flat	AUX	Bottom (Laptop)	0	Option 1	22.9	22.9	**0.006**
	Step 7. Change to the channels										
	1	2412	BPSK(6Mbps)	Flat	AUX	Right Side(Tablet)	0	Option 1	22.9	22.9	**0.218**
	11	2462	BPSK(6Mbps)	Flat	AUX	Right Side(Tablet)	0	Option 1	22.9	22.9	**0.234**